

6. *Brassica rapa* L. ssp. *campestris* (L.) Clapham.: If *B. rapa* L. and *B. campestris* L. are considered distinct at sub-species level, then *B. campestris* L. ssp. *rapa* Hook.f & Anders (1872) has priority over *B. rapa* L. ssp. *canipestris* (L.) Clapham (1962).

7. *Embelia tsjarium-cottam* (R. & S.) A. DC. is nomen dubium, which is not properly typified yet and may belong to some other plant. The correct name for the species known under this name is *E. basal* (R. & S.) A. DC. (see Almeida, Fl. Maharashtra, Vol. 3).

8. *Balliospermum montanum* (Willd.) Muell.-Arg. has been changed to *B. solanifolium* (Burm.f.) Suresh (see Nicolson *et al.*, Interpret. Hort. Mal. P. 1988).

9. The species known as *Bridelia retusa* (L.) Spr. in our Indian Floras is now called *B. airy-shawii*, for which the correct name may be *B. spinosa* Willd.

10. Correct name for *Buchanania lanzen* Spr. is *B. cochinchinensis* (Lour.) Almeida (see Fl. Maharashtra, Vol. 1).

11. Correct name for *Coleus forskohlii* (Willd.) Briquet is *Solenocarpus barbatus* (Andr.) Codd. *Solenopteris* Thonn. is the earliest generic name for *Coleus* Lour., if treated as a separate genus from *Plectranthus* L'Herit.

12. Nomenclature of *Artemisia nilagirica* var. *septentrionalis* (Clarke) Panigrahi has been confused

by adding *A. vulgaris* var. *nilagirica* Clarke to its synonymy.

13. *Amorphophallus paeoniifolius* Nicolson is not synonymous with *A. campanulatus* Blume ex Decne as presumed initially by Nicolson. Sivadasan later reduced *A. campanulatus* Blume to the varietal rank under *A. paeoniifolius* (Dennst.) Nicolson, which also remains doubtful.

14. Rechecking is required for the nomenclature of *Arisaema tortuosum* (Wall.) Schott and its variety *curvatum* (Roxb.) Engler. From the synonyms cited, it appears that what is referred to as variety *curvatum* may be a typical variety and that which is referred to as *A. tortuosum* var. *tortuosum* may have to be correctly called *A. tortuosum* var. *helleborifolium* (Schott.) Engler as done by Nair (1978).

15. The correct generic name for *Indocourtosia* Bennet & Raizada is *Courtosinia* Sojak and that for *Indocourtosia cyperoides* (Roxb) Bennet & Raizada is *Courtosinia cyperoides* (Roxb.) comb. nov.

Regarding the price of the book, I would only like to state that a book that is priced at more than a rupee per page of printed matter is over-priced, unless it is illustrated with colour photographs, which naturally increases the cost of printing.

M.R. ALMEIDA

2. THE FLORA OF THE PALNI HILLS (in 3 parts): Pt I (Polypetalae) pp. xcvi + 1-576; Pt II (Gamopetalae and Monochlamydae) pp. iii + 576-1196; Pt III (Monocotyledones) pp. iii + 1197-1880 (26 x 20 cm) by K.M. Matthew. Published for Rapinat Herbarium at SCTP Offset Press, Christianpet, Vellore, India, 1999. Price (set of 3) Rs. 600/ £ 100/ \$ 175.

This Flora, consisting of three parts, is the second phase covering the montane counterpart of FLORA OF TAMILNADU, the first phase being FLORA OF TAMILNADU CARNATIC, covering the lowlands. The total work done over a quarter of a century from 1976 to 1999, has resulted in the publication of twelve volumes. This Flora describes about 2,500 species based on about 15,000 fresh herbarium collections spread over 323 days of fieldwork.

In the third part of this Flora, the author has taken the help of two other taxonomists to revise some families, namely Gunnar Seidenfaden for Orchidaceae and K.T. Mathew for Juncaceae, Eriocaulaceae, Cyperaceae, Graminae and Gymnospermae.

Rev. Fr. K.M. Matthew, after trying his hand at revision of Family Cornaceae for FLORA MALESIANA with a ZWO fellowship from the Dutch Government at The Rijksherbarium, Leiden, Netherlands, returned to India in 1974 and prepared a scheme for the revision of the

comprehensive illustrated FLORA OF TAMIL NADU. Since then, he has collected more than 50,000 herbarium specimens. When he started the work on FLORA OF TAMIL NADU CARNATIC, Fr. Mathew felt that the days of general plant collection were over and the era of monographic work had begun. But over a period of time, he has not only begun to believe in the value of fresh collections, but is proud of his freshly collected herbarium. He admits that he has rightly opted for floristic work, leaving the monographic, which some of his colleagues at Leiden wanted him to pursue. One thing is certain, Rev. Fr. Mathew has shown that with dedication you can accomplish much, despite limited assistance.

However, at the conclusion of FLORA OF PALNI HILLS, his achievements are one new combination *Chamaecrista kleinii* (Hook.f.) K.M. Matthew at species level and two new combinations at the intraspecific level, namely *Commiphora caudata* (Wt.

& Arn.) Engler var. *pubescens* (Wt. & Arn.) K.M. Matthew and *Solanum violaceum* Ortega ssp. *multiflorum* (C.B. Clarke) Matthew. He depends too much on the opinions of other experts and cannot form an independent opinion, and that is why he has left the identities of many taxa undecided, although he has come close to identification of their allies.

The text of the Flora, after keys to families (according to Bentham and Hooker's system of classification), genera and species, is in the following format:

1. Correct botanical name of the species, followed by basionym and synonyms, followed by local and English names.
2. Description of species.
3. Distribution and altitudes of occurrence.
4. Phenology.
5. Phytogeography.
6. Exsiccata.
7. Conservation notes.

The following appendices appear at the end of Part III:

- I. Cultivated species of the Palni hills.
- II. Field itineraries on Palni hills.
- III. Alphabetical list of books referred to in the Flora.
- IV. Alphabetical list of periodicals referred to in the Flora
- V. Journals in the herbarium (RHT) library.
- VI. Germination data of native species (255 spp.).

Appendix VI may be the most attractive among the Appendices. I wonder if Appendices III and IV are lists of the books and periodicals referred to, or books and periodicals cited in the Volume.

In many cases, however, all the heads mentioned above are not strictly adhered to. In Part I, for example, there are 788 species. Of these, 143 have no data on phenology. Plants not described number 257, and many have merely one or two lines of description (probably because they have been described in FLORA OF TAMIL NADU CARNATIC earlier, for which the reference is given, making it mandatory to have that Flora at hand while using this one).

Many species are included based on Anglade's unedited drawings, which are cited in references. Such species are not described. There is no evidence that the figures Anglade made are from plants collected from Palni hills or brought from other localities. Examples of such plates are *Lonicera caprifolium* L. (t. 281), *Lonicera etruca* Santi (t. 282), and *Lonicera periclymenum* L. (t. 286).

The following species are based on specimens at

Kew and other places, not on recent collections, and one would believe that Matthew has extensively surveyed the area, and they are presumably locally extinct:

1. *Lasianthus stigilobus* Hook.
2. *Blumea hieracifolia* var. *macrostachya* (DC.) Hook.f.
3. *Carpesium cernuum* L.
4. *Pratia nummularia* (Lamk.) Braun & Aschers
5. *Rhododendron policum* L.
6. *Tylophora macrantha* Hook.f
7. *Tylophora pauciflora* W. & A.
8. *Argyrea pilosa* Arn.
9. *Barleria longifolia* L.
10. *Acrocephalus palniensis* Mukherjee
11. *Emex spinosus* (L.) Compel.
12. *Dendrophthoe memecylifolia* (W. & A.) Danser
13. *Delechampia indica* Wt.
14. *Eriocaulon melaleucum* Mart.
15. *Cyperus elatus* L.
16. *Fimbristylis bisumbellata* (Forsk.) Bubani
17. *Fimbristylis eragrostis* (Nees) Hance
18. *Fimbristylis squarrosa* Vahl
19. *Lipocarpha sphacellata* (Vahl) Kunth
20. *Mariscus cyperoides* A. Dietr.

As mentioned earlier, Matthew relies heavily on help from other botanists without verifying the nomenclature himself and following his own judgement. I would cite an example here of *Tylophora tetrapetala* (Dennst.) Suresh in Nicolson *et al.*, which is a wrong and illegitimate name. Many Indian works, which have brought nomenclatural changes as per ICBN rules are not noticed or neglected. For example, Ramamurthy (in Fl. Hassan Dist. p. 340, 1976) equates *Excoecaria robusta* Hook.f with *E. crenulata* Wight, which is overlooked in the Flora. In the note under *Drypetes roxburghii* (Wall.) Hurusawa, Dr. Matthew states, "The case of retaining this species under the genus *Putranjiva* (Ety.: Life of the son), owing to its fertility properties, is strong." This note was uncalled for. Matthew accepted Bowles and Stearn's reduction of *Atragene japonica* Thunb. (1784) to a varietal rank under *Anemone hupehensis* Lemoire ex Boynton (1931), without explaining why Thunberg's prior name could not be accepted as *Anemone japonica* (Thunb.) Almeida (comb. nov.). *Hibiscus furcatus* Willd. (1809) has been placed in synonymy of *Hibiscus hispidissimus* Griffith (1854) without assigning any reason. In Pinaceae, in Gymnospermae, which has been revised by both K.M. Matthew and K.T. Mathew following two synonyms, as per citations, seem to have come from the same publication. Which one of them has come from



the reference cited I leave to the readers to find out:

*Pinus kesia* Royle ex Gordon in Loudon, Gard. Mag. (London) 16: 8, 1840.

*Pinus khasya* Royle, Gard. Mag. (London) 16: 8, 1840.

K.T. Mathew seems to be not in the habit of citing basionyms and synonyms if he can avoid them. One has the feeling that he is sure about his accepted name and does not think there is any scope for further nomenclatural correction. However, in the few places where he has cited the synonyms he is in troubled waters, as in the case of *Scirpus quinquangularis* Vahl, *Cyperus uniloides* R. Br. and *Scirpus michelianus* Linn. Under *Carex lindleyana* Nees ex Wt. (1834) he has given two more varieties. Additional varieties are provided with segregating key, while the typical variety has been left out. It appears from the exsiccata cited under typical and the note at the end of infraspecific taxa that the typical variety is a distinct variety from the other two and it cannot be fitted in the key given to the other two.

As already mentioned, Orchidaceae has been revised by Gunnar Seidenfaden. I am surprised to find some confusion in nomenclature in his part of the work too. Under *Brachycorythis iantha* (Wt.) Summerh. (which is based on *Platanthera iantha* Wt. (1851) there are three names highlighted in bold type in the synonymy along with *Platanthera obcordata* Lindl. (Gen. & Sp. Orchid. Pl. 290, 1835). If we consider the bold lettered synonyms a typographical error, the correct name for this species should be *Brachycorythis obcordata* (Lindl.) comb. nov. which I propose here. At the end of the test of this species, Seidenfaden mentions the type (of the species?) as specimens from Nilgiris (Wight, s.n., K, BM). I believe that types pertain to a name and not to a species. There has to be a type for each name. If there are five heterotypic synonyms there should be five different types. *Platanthera iantha* must have a type. If there are two specimens of this species, one at

Kew (K) and another at the British Museum (BM), one of them can be a Holotype (or Lectotype) and other may be called Isotype or Paratype (or Syntype). Similarly, *Platanthera affinis* Wt. must have a separate type; *P. galeandra* Rech.f must have yet another type and *Platanthera obcordata* Lindl. may be typified by Wallich Cat. no. 7050A or 7050B and *Habenaria galeandra* Benth. var. *nilagirica* Hook.f must have a different type.

Under *Peristylis exilis* Wight, Seidenfaden cites contrasting synonyms as mentioned below:

*Habenaria aristata* (Lindl.) Hook.f.

*Peristylis aristatus* auct. non Lindl.

Seidenfaden also accepts *Habenaria virens* (Lindl.) Hunt & Summerhayes when there is an existing homonym by Abywickrama. His argument that Hunt and Summerhayes did not mention *Habenaria virens* (Lindl.) Abyw. (1959), possibly because Abywickrama's transfer was considered invalid due to wrong citation of basionym, is not appropriate in this case because the later homonym of Hunt and Summerhayes cannot be validated as per ICBN rules. The name *Seidenfia rheedii* (Sw.) Szlachetko is based on *Malaxis rheedii* Sw., which is supposed to have included *Epidendrum resupinatum* in the synonymy which renders Swart's name illegitimate. Therefore, the next available valid name for this species is *Microstylis versicolor* Lindl. (Gen. & Sp. Orchid. Pl. 21, 1830) and the correct name for this species should be *Seidenfia versicolor* (Lindl.) Almeida (comb. nov.).

The price of the book Rs. 600 is at least half the market value today (not quarter as claimed by author). I congratulate Rev. Fr. Matthew for successfully completing his plan and compliment him for undertaking the publishing work and providing his Floras to researchers and scientific communities at such low rates.

M.R. ALMEIDA

3. MEDICINAL PLANTS IN ANDHRA PRADESH (INDIA) by T. Pullaiah. Pp. iii + 262 (23.0 x 15.5 cm). Published by Regency Publishers (20/36 – G, Old Market, West Patel Nagar, New Delhi 110 008). Price Rs. 700/-.

This book lists 409 species of medicinal plants found in Andhra Pradesh, arranged in alphabetical order of scientific plant names. The author's un-named and undated preface mainly describes the location of Andhra Pradesh, with three lines of explanation regarding the arrangement of entries of the species in the book and acknowledgement of the author to his wife for help in preparation of the manuscript. It gives 121 line drawings

of species listed and 14 plates consisting of 68 coloured photographs of medicinal plants. The text gives accepted names of species (occasionally with a few synonyms), family to which the species belongs, short description (3-5 lines), occurrence and distribution, flowering and fruiting seasons, propagation by seed or cuttings, and medicinal uses, which are reproduced from earlier published literature.